



# WOOD DUCK CAPTURE



**Facing page: Wood ducks trapped by a rocket-thrown net wait for a research band (above) to be attached to their leg. Hunters have taken Kentucky-banded wood ducks in 37 states and provinces.**

**T**HE SHRILL SQUEALS of wood ducks fill the air as the first glimmer of light appears in the western Kentucky sky.

Dark shapes of wood ducks appear overhead; they dart among the cypress trees whose trunks are planted in the shallow water slough. Dozens of wood ducks become hundreds as more birds land in the slough next to shore, where a line of corn awaits.

Over the next 30 minutes, the swarming mass of wood ducks drifts closer to dry land before moving back to the safety of the swamp. Suddenly, a handful of wood ducks runs up the shore to the bait. This triggers an all-out scramble from the remaining birds to reach the corn; some birds are flying while others are running. Just as suddenly, the flock flushes from the bait and flees back to the safety of the water.

After a short wait on the water, the flock begins another mad dash to the bait. Birds are running or flying to get to the bait before it's all eaten. The gleeful squeals of ducks fill the air as an electric charge ignites rockets attached to a net next to the bait.

A thunderous roar and a cloud of smoke erupts as the net flies across the cluster of birds. Nearly 200 wood ducks are caught in the mesh as the net settles to the ground. Employees of the Kentucky Department of Fish and Wildlife Resources will capture each bird, attach a metal band to its leg then release it unharmed back to the swamp.

Each summer, Kentucky Fish and Wildlife researchers capture and band more than 2,000 wood ducks across the state. Banding provides one of the most powerful tools available to the wildlife management professional available today, because it provides insight into the population dynamics and movements of this important species.

Capturing and banding wood ducks requires extensive preparation. For example, it may take weeks to scout out and identify areas with the adequate concentrations of wood ducks. Once areas are known, each site must be cleared of shrubs and all debris so the ducks will feel safe from predators. Clearing a site also ensures nothing will snag the net.

Afterward, employees put out bait for several weeks before attempting to capture any birds. The line of bait must be maintained daily. Once wood ducks start visiting the site and eating the bait, biologists set up a net so the birds will get used to its presence.

Researchers use explosive charges to launch the net over the unsuspecting birds feeding on the bait. These rocket nets are triggered remotely and do not harm the birds.

In the last days before the netting attempt, biologists watch the net for several mornings to learn the behavior of the flock coming to the bait. The behavior of each group of wood ducks can be dramatically different.

Wood ducks are generally uncomfortable with leaving the safety of the water

## BANDING PROVIDES RESEARCHERS NEW INSIGHT ON MOVEMENT

Story and photos by John Brunjes

**Startled wood ducks are unable to escape a trapping net propelled by rockets.**



to eat. They rarely leave the water until it is bright enough to see any predators that might be in the area. Wary birds will flush off the bait into the water then return to the shore several times to feed. Wood ducks typically are most susceptible to capture between their second and third flushes.

Once birds are on the bait and everything is safe for capture, the net is fired. Within seconds, the net is stretched out on the ground and alive with captured wood ducks.

Researchers carefully inspect each wood duck to determine its age and sex before attaching a uniquely numbered band to its leg and releasing the bird. Banding information is submitted to the U.S. Geological Survey's Bird Banding Laboratory. The lab serves as the data repository for all birds banded in North America. Hunters fortunate enough to harvest a banded bird can report it to this group; the information helps biologists track bird movements.

Researchers already know that wood ducks are a common breeding waterfowl in Kentucky. On an annual basis, wood ducks make up a large portion of the overall duck

harvest in Kentucky – ranking second to mallards in most years.

In Kentucky, 86 percent of wood ducks harvested in the state are taken during the five-day September season. Kentucky is one of only three states with a September season for wood ducks. However, in order to maintain this special season, Kentucky Fish and Wildlife employees must band and monitor wood duck populations across the state.

This monitoring requirement allows biologists to track the movement of wood ducks originally banded in Kentucky. It also

provides an interesting look into wood duck movement.

More than half of the Kentucky-banded wood ducks taken by hunters each year are harvested within the state. However, as the weather grows colder, most wood ducks leave Kentucky and head to deep southern states.

Research reveals that nearly 21 percent of the wood ducks banded in Kentucky are harvested in Alabama, Mississippi and Louisiana. But wood ducks banded in Kentucky are remarkably well-traveled. Banding data collected from 2002-2012 shows hunters took Kentucky wood ducks in 37 states and provinces, with band recoveries coming from as far away as Maine and Colorado.

Within Kentucky, hunters harvest an equal number of male and female wood ducks. Outside of Kentucky, 68 percent of the Kentucky-banded birds harvested are male. This is because male wood ducks pair with females on the wintering grounds. Those females will then take males born in Kentucky to other regions to breed and be harvested in subsequent seasons.





**Clockwise from top left: Department employees hold down the net; Wildlife Program Coordinator Tony Black climbs under the net to capture a duck; a volunteer holds a wood duck while Wildlife Biologist Pat Hahs clamps a band onto its leg; Wildlife Biologist Mike Morton (since retired) and Wildlife Technician Michael Hutcheison (not wearing hat) band and record information on wood ducks.**

Banding also provides valuable information on the survival rates and harvest rates of wood ducks. This in turn aids management decisions. For example, an analysis of banding data from across the Atlantic and Mississippi flyways recently allowed biologists to increase the daily bag limit of wood ducks from two to three. The banding data allows biologists to closely monitor survival rates to make sure harvest is not negatively impacting populations.

Hunters lucky enough to harvest a banded wood duck can report it online at [www.reportband.gov](http://www.reportband.gov) or by calling 1-800-327-BAND. The information from this is invaluable to those managing this amazing duck. ■



**Seven-year-old Coy Divine releases a banded duck as his father, Curt Divine, supervises. Volunteers and kids often help with the banding.**